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Active material for battery - is a mixture of a lithium compound, a nickel compound, at least one kind of transient metal compound, and an alkali earth metal compound, and an active material

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Abstract (Basic): JP 11195416 A

A raw material compound is a mixture of a lithium compound, a nickel compound, at least one kind of transient metal compound, and an alkali earth metal compound, and an alkali earth metal compound, and an active material for a battery represented by a chemical formula is produced. The chemical formula is Lilx-a AxNily-bByO2, wherein A is an alkali earth metal element, B consists of at least one kind of a transient metal element except Ni, X and Y satisfy relation formulae of 0 < Y at most 0.10 and 0 < Y at most 0.30, (a) and (b) satisfy formulaeof - 0.10 at most a at most 0.10 and - 0.15 at most b at most 0.15, wherein X is the total number of mols and in a case of A consisting of at least two kinds of alkali earth metal elements, X is the total number of mols of whole alkali earth metal elements, and Y is the total number of mols of B, and in a case of B consisting of at least two kinds of transient metal elements, Y is the total number of mols of all transient metal elements. In this method, a continuous burning furnace is used. An amount of drying air ten times per hour the volume of the heating part of the continuous burning furnace is supplied and discharged and heated at 400 - 900 deg. C for reaction.

ADVANTAGE - A positive electrode active material has high capacity and a good charge discharge cycle.

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Title Terms: ACTIVE; MATERIAL; BATTERY; MIXTURE; LITHIUM; COMPOUND; NICKEL; COMPOUND; ONE; KIND; TRANSIENT; METAL; COMPOUND; ALKALI; EARTH; METAL; COMPOUND; ACTIVE; MATERIAL

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